



SUNRISE ENGINEERING, INC.

25 East 500 North • Fillmore, Utah 84631
Tel (435) 743-6151 • Fax (435) 743-7900

OFFICES IN
UTAH
IDAHO
ARIZONA
WYOMING

August 19, 2003

Mr. Garth Swallow, Trustee and Manager Member
Garth J Swallow Revocable Trust and Swallow Farms, L.L.C.
P.O. Box 486
Fillmore, UT 84631

Re: Report on 2003 Irrigated Acreage in Response to Division of Water Rights' (DWRts').
Notice of July 18, 2003

Dear Garth:

You furnished me with a copy of Mr. Forbush's "Notice" as referenced above, as well as your Response letter of July 28, 2003 and requested that Sunrise Engineering, Inc. prepare an analysis and the maps mandated in the Memorandum Decisions on your several water rights, which are all summarized in the attached Water Right Summary Chart. I also have copies of the pertinent Memos.

The enclosed maps are near Proof ready maps, except for the fact that we have not taken the last step to break the parcels down into 40 acre-tracts, which is not necessary at this point to identify overall totals. Data for the maps comes from 3 basic sources: 1) Actual field survey data from surveys done for you by this firm; 2) Actual physical dimensions of pivots and linear systems, from manufacturers specifications furnished to you by the respective manufacturers; and 3) Field measurements made by myself to determine sprinkler reaches beyond the physical limits of the irrigation equipment, such as end-gun coverage. The NRCS aeriels were used to help locate and identify irrigated areas; although acreages from these aeriels are close, they were not relied on since NRCS indicated that their camera did not maintain accurate scale factors across the full range of the images. All map acreages are as reported by AUTOCAD.

There are 3 maps attached to this report. These maps are:

1. Well Acres, Sheet 1 of 2 Acreage in the Sink area of Flowell
2. Well Acres, Sheet 2 of 2 Acreage in the Utley Farms' area of Flowell
3. Exhibit 3 Proof Map for a19928

Note: All Place-of-Use acreage is covered by approved change applications for underground and surface sources.

The irrigated acreages are shown on each map, and summarized on the right-hand side of the

attached Water Rights Summary Chart.

When the mapped acreage is compared with your total Sole Source underground right, I have found that the total acreage under your well-supplied irrigation systems slightly exceeds your Sole Supply right, by the amount of 27.21 acres, or 1.4%.

However, to address your suggestion in your July 28 Letter to Mr. Forbush, I offer the following further analysis:

All of the acreage tabulated received irrigation from your various wells in the current 2003 irrigation season. There are a few acres, not identified on the maps or tabulated, that were irrigated in the current season by surface sources only, the somewhat pie-shaped piece of approximately 8 acres on the NW of the big pivot, and a couple of pie-shaped pieces on the SW of the big pivot, possibly another 6 or 7 acres, for a total of about 15 acres. I understand that all of the balance of your Chalk Creek water this season was utilized in your pressure systems.

I have received from the Chalk Creek Watermaster's Office their report of turns and deliveries to Swallow Farms for 2003; my analyses of these turns indicates 485 acre-feet of surface water was delivered to you this season. Because your Chalk Creek turns ended after June 5, if we allow a generous application of 2 acre-feet per acre for the 15 acres solely served by surface source, then $(485 - 30 =)$ 455 acre-feet remain to supplement the wells, which constitutes a complete seasonal duty for $455/4 = 113.75$ acres. (The efficiency of your current irrigation systems is generally such that the actual per acre crop requirements for your farm is less than 4 acre-feet per acre per year, but the 4 a-f figure should at least be a maximum.)

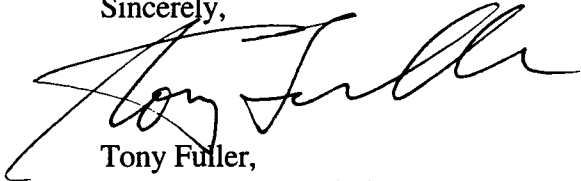
When this supplemental water is taken into account, the 27.21 acres overage becomes $(113.75 - 27.21 =)$ 86.54 acres less than your Sole Supply right. This means that overall you will leave at least $(4 \times 86.54 =)$ 346.16 acre-feet in the underground reservoir that your rights say you could have diverted. (Again, the efficiency of your system allows you to operate with a lessor diversion, and some calculations could be made to show the additional savings from efficiency, but I think the preceding is sufficient to illustrate your point.)

I prepared the Water Rights Summary Chart based on my extensive work with Mr. Monroe of the DWRts on the subject over several years, identifying and cataloging these extensive rights in detail, in preparation for filing the Change Applications. There are very few points on the Chart that have not been checked and agreed to by Mr. Monroe of Mr. Forbush's Office.

One point that still needs to be addressed, which you referred to in your May 19, 2003 letter, is the variance between the flow rate filed in Change a24777 of 17.139 cfs and the flow rate attributed to the "applicants" in the Memo, that is 17.2783 cfs. In analyzing the Change Application approvals, I found that this difference results solely from how Mr. Monroe apportioned the flow in 67-416. Initially, he told me that he would apportion it according to time-share, but he either changed his mind or someone directed him to handle it differently,

and it was apportioned according to acreage covered. In the meantime, the deeds and change applications were prepared based my initial understanding. When the deed went in to DWRts, the acreage portion was used to override the flow portion; what was intended in the Change was all of the flow that went with the acreage, and now the Memo says you can't have the flow since it wasn't included in the Change. It appears to me that Mr. Forbush should consider some means of correcting this problem short of your having to file a corrected application, paying the filing fee again, and having to wait (another 2 years?) for another approval.

Sincerely,

A handwritten signature in black ink, appearing to read "Tony Fuller". The signature is fluid and cursive, with the first name "Tony" and last name "Fuller" clearly distinguishable.

Tony Fuller,
Water Rights Specialist